

B. AMENDMENT TO CLAIMS

1. (Currently Amended) A process for reducing the amount of a pollutant in a flue gas resulting from combustion of fossil fuel in a boiler comprising:
 - (a) providing an alkaline admixture having a siloxane coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
 - (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of the pollutant in the flue gas.
2. (Original) A process as recited in claim 1 wherein the alkaline admixture is comprised of CaO, CaCO₃, MgO and MgCO₃.
3. (Original) A process as recited in claim 2 wherein a physical size of the alkaline admixture is greater than 50% minus 200 mesh.
4. (Currently Amended) ~~A process as recited in claim 2 wherein the amount of CaO, CaCO₃, MgO and MgCO₃ are each from 10 to 35% by weight of the total weight of the alkaline admixture.~~
A process for reducing the amount of a pollutant in a flue gas resulting from combustion of fossil fuel in a boiler comprising:

- (a) providing an alkaline admixture comprised of CaO, CaCO₃, MgO and MgCO₃ having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone, the amount of CaO, CaCO₃, MgO and MgCO₃ are each from 10 to 35% by weight of the total weight of the alkaline admixture; and
- (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of the pollutant in the flue gas.

5. (Currently Amended) ~~A process as recited in claim 1 wherein an amount of the coating agent is from .05 to .15 percent by weight of the alkaline admixture.~~

A process for reducing the amount of a pollutant in a flue gas resulting from combustion of fossil fuel in a boiler comprising:

- (a) providing an alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone, the amount of the coating agent is from .05 - .15 percent by weight of the alkaline admixture; and
- (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of the pollutant in the flue gas.

6. (Currently Amended) ~~The method as recited in claim 1 wherein the alkaline admixture has at least 5% magnesium by weight of the alkaline admixture.~~

A process for reducing the amount of a pollutant in a flue gas resulting from combustion of fossil fuel in a boiler comprising:

- (a) providing an alkaline admixture comprising at least 5% magnesium by weight of the alkaline admixture, the alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
- (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of the pollutant in the flue gas.

7. (Currently Amended) ~~The method as recited in claim 1 wherein the pollutant is sulfur trioxide.~~

A process for reducing the amount of sulfur trioxide in a flue gas resulting from combustion of fossil fuel in a boiler comprising:

- (a) providing an alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
- (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of sulfur trioxide in the flue gas.

8. (Original) A process as recited in claim 7 wherein an amount of coated alkaline admixture is from 2 to 15 moles of total alkalinity per mole of sulfur trioxide removed.
9. (Currently Amended) ~~The method as recited in claim 1 wherein the pollutant is mercury.~~
A process for reducing the amount of mercury in a flue gas resulting from combustion of fossil fuel in a boiler comprising:
- (a) providing an alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
 - (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of mercury in the flue gas.
10. (Currently Amended) ~~The method as recited in claim 1 wherein the pollutant is arsenic.~~
A process for reducing the amount of arsenic in a flue gas resulting from combustion of fossil fuel in a boiler comprising:
- (a) providing an alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
 - (b) introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of arsenic in the flue gas.

11. (Currently Amended) A process for reducing the amount of a pollutant from a flue gas resulting from combustion of fossil fuel comprising:
- (a) providing an alkaline admixture having a coating agent that improves dispersability and delays calcination of the alkaline admixture within a combustion zone; and
 - (b) adding the alkaline admixture to a fossil fuel feed within a combustion zone and thereby introducing the alkaline admixture to the boiler to create a reaction that reduces the amount of the pollutant in the flue gas.
12. (Original) A process as recited in claim 11 wherein the alkaline admixture is comprised of CaO, CaCO₃, MgO and MgCO₃.
13. (Original) A process as recited in claim 12 wherein the amount of CaO, CaCO₃, MgO and MgCO₃ are each from 10 to 35% by weight of the total weight of the alkaline admixture.
14. (Original) A process as recited in claim 11 wherein a physical size of the alkaline admixture is greater than 50% minus 200 mesh.

15. (Original) A process as recited in claim 11 wherein an amount of the coating agent is from .05 to .15 percent by weight of the alkaline admixture.
16. (Original) The method as recited in claim 11 wherein the alkaline admixture has at least 5% magnesium by weight of the alkaline admixture.
17. (Original) The method as recited in claim 11 wherein the pollutant is sulfur trioxide.
18. (Original) A process as recited in claim 17 wherein an amount of alkaline admixture is from 2 to 15 moles of total alkalinity per mole of sulfur trioxide removed.
19. (Original) The method as recited in claim 11 wherein the pollutant is mercury.
20. (Original) The method as recited in claim 11 wherein the pollutant is arsenic.
21. (Cancelled)
22. (Previously Presented) The method as recited in claim 1 wherein the amount of the coating agent is .05 to .15 percent by weight of the alkaline admixture.